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PRE-APPEAL BRIEF REQUEST FOR REVIEW	Docket Number (Optional) JRL-4208-43 **Confirmation No. 7385**

	Application Number 10/583,962	Filed June 21, 2006
(OPAP stamp: MAY 1 3 2011 PATENT & TRADEMARK OFFICE)	First Named Inventor FODOR	
	Art Unit 2461	Examiner Beyen, Zewdu A.

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).
    Note: No more than five (5) pages may be provided.

I am the

☐ Applicant/Inventor

☐ Assignee of record of the entire interest. See 37 C.F.R. § 3.71. Statement under 37 C.F.R. § 3.73(b) is enclosed. (Form PTO/SB/96)

☒ Attorney or agent of record   33,149
                             (Reg. No.)

☐ Attorney or agent acting under 37CFR 1.34.
  Registration number if acting under 37 C.F.R. § 1.34 _____

_____
Signature

John R. Lastova
_____
Typed or printed name

703-816-4025
_____
Requester's telephone number

May 13, 2011
_____
Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.*

☒ *Total of 1 form/s are submitted.

If you need assistance in completing the form, call 1-800-PTO-9199 and selection option 2.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

FODOR ET AL.

Appl. No. 10/583,962

Filed: June 21, 2006

Atty. Ref.: 4208-43; Confirmation No. 7385

TC/A.U. 2461

Examiner: Beyen, Zewdu A.

For: CONTROL OF MOBILE PACKET STREAMS

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May 13, 2011

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

SECOND PRE-APPEAL BRIEF REQUEST FOR REVIEW

The new office action received in response to the first pre-appeal brief withdrew the rejection for lack of written description support and the obviousness rejection based on Mitchell, Das, Fieschi, and Shew. However, the Examiner makes a new obviousness rejection of claims 1, 2, 4-10, 12, and 15-20 based on Mitchell and newly-applied Suzuki (USP 6,507,873) and secondary rejections adding Das and Ramsayer are used in combination with Mitchell and Suzuki to reject dependent claims 13, 14 and 3, 11, respectively. There are clear errors in these rejections.

Mitchell describes discovering and registering middleboxes in response to a call set-up message. For the middlebox "binding" referred to in [0062], the call servers 18 request the middlebox to set up a voice packet path from terminal A, and in response, the middlebox replies with a public address and port to which packets from terminal B to terminal A should be sent. Unlike the claims which relate to the registration and control of mobile user data packet flows for purposes such as QoS differentiation or transcoding, Suzuki deals with something entirely

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different—address assignment. See, e.g., Suzuki's title "Network address assigning system,"

abstract: "A network address assigning system...," and summary and claims: "A network

address assigning system...."

Clear Error #1: Mitchell and Suzuki Lack the Registration and Control of Mobile User Data Packet Flows.

Step a of claim 1 recites "controlling individual mobile user data packet flows forwarded

on the IP-based user plane from a common, IP-based control plane provided with one or more

midcom agents, where the common, IP-based control plane is separate from the IP-based user

plane," steps b and c relate to registering "each mobile user data packet flow," and step d recites

"the midcom agent signalling control orders to the registered middleboxes, said orders pertaining

to the handling of the mobile user data packet flows at respective middleboxes in the IP-based

user plane." Nowhere does the office action explain where either Mitchell or Suzuki teaches the

registration and control of mobile user data packet flows.

The office action simply identifies "each flow (i.e. call set-up message)" on page 3. But

a call set-up message is a <u>control</u> message and <u>not</u> an "individual mobile <u>user data</u> packet flow[]

forwarded on an IP-based user plane, where each mobile user data packet flow is separate and

different from session set up messages sent with IP layer control signaling and/or session layer

control signaling," as recited in claim 1. Mitchell's call set-up message from terminal A to

middlebox 1 and from middlebox 1 to the call server 18 (midcom agent) cannot be mapped to the

claimed mobile user data packet flow.

The data flow/bearer B in Mitchell does not register its presence in each middle box as

recited in step b of claim 1: "each mobile user data packet flow registering its presence in each

middlebox it encounters on its way from its source to its destination in the IP based user plane."

In fact, the bearer connection B, which Applicants believe corresponds to the user data flow

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between the middleboxes 1 and 2 and users A and B in Figure 6, is not described in much detail by Mitchell outside of paragraph [0046]. Ultimately, Mitchell does not disclose how middlebox registration handles mobile user data packet flows.

Nor does the Examiner identify what in Suzuki teaches "mobile flows" – let alone individual mobile user data packet flows. The office action simply identifies "network addresses" and "address information" which plainly is not individual mobile user data packet flows. So even if these two references could be combined, which they cannot be, they fail to teach the registration and control of mobile user data packet flows.

Clear Error #2: Mitchell and Suzuki Lack the Claimed Middlebox and Midcom Agent Functionality.

Page 4 of the new office action admits that Mitchell lacks a teaching of multiple elements recited in claim 1 including for example: (1) middlebox registration at a midcom agent (mapped onto call servers/proxies 18 in Figure 6) or at middleboxes (mapped onto middleboxes 10, 11) (see step b of claim 1), (2) "the common, IP-based control plane is separate from the IP-based user plane," (3) "each mobile user data packet flow is separate and different from session set up messages sent with IP layer control signaling and/or session layer control signaling." For the admitted missing features, the Examiner turns to Suzuki's abstract, figure 2, and col. 4, lines 17-24 quoted here for convenience:

> FIG. 4 shows the first method of the address deciding process.
> Referring to FIG. 4, an address server 1 notifies routing nodes 2 to
> 5 connected to a main network 16 of addresses of the routing nodes
> 2 to 5. When a network address of a routing node is changed, the
> address server 1 notifies other routing nodes of relevant address
> change information.

First, the Examiner never clearly identifies what in Suzuki is the middlebox, midcom agent, control plane, or user plane. It seems like the Examiner may be mapping Suzuki's routing

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nodes 2-5 to middleboxes and address server 1 to a midcom agent. A person of ordinary skill would not make such a mapping. As can be gleaned from Mitchell, a middlebox processes <u>user data packets</u> in addition to traditional best-effort store and forwarding. Examples of such middlebox processing include QoS differentiation or transcoding. This processing is controlled by a midcom agent. Suzuki's invention is directed to handling address management for basic connectivity and not user data packets. Thus, it is not meaningful to map the nodes described in Suzuki to middleboxes or midcom agents.

It is also important to remember that claim 1 is not simply reciting any node registering with another management node. Rather, step c in claim 1 specifically recites: "in response to step b [user data flow registration in each middlebox], <u>each middlebox</u> in the IP based user plane registering itself and the identities of mobile user data packet flows it handles in the IP based user plane at a <u>midcom agent</u> in the common, IP-based control plane using an extended midcom signalling protocol." Suzuki does not teach the claimed middlebox or midcom agent.

Ultimately, Mitchell and Suzuki do not disclose or suggest registering mobile <u>user data</u> flows that move between different middleboxes so that movement of a mobile terminal or a moving network can be accommodated. The Examiner never explains how fixed router node network addresses or address changes in Suzuki is the same as mobile user data flows. In addition, there is no teaching in Mitchell or Suzuki of registering the mobile user data flow identities at a midcom agent together with the identity of the middlebox that the flow traverses allows the flow to be bound to a specific flow control process in the midcom agent even though the flow may move between different middleboxes during a call.

Moreover, claim 1 is not reciting an IP-based control plane separate from an IP-based user plane in a vacuum. The Suzuki reference is a general router addressing reference, and the Examiner makes no attempt to identify where Suzuki teaches middleboxes, midcom agents, and

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the interactions between them and mobile <u>user data</u> packet flows. The piece-meal approach to the rejection is evident and improper. The pre-appeal panel is reminded that each claim and each reference must be considered as a whole.

Clear Error #3: The Combination Is Improper. The Examiner tries to justify the combining Suzuki with Mitchell because it "would benefit the system to reliably route packets." But the Examiner never explains <u>why</u> or <u>how</u> Suzuki's network addressing scheme would benefit Mitchell. The object in col. 2, lines 43-46 used by the Examiner to support this allegation deals with a moving routing node and managing address "in a multi-home format." But Mitchell is not using moving routers, so this object is irrelevant.

The mere fact that references might somehow be combined or modified does not render the resultant combination obvious unless the results would have been predictable to one of ordinary skill in the art. See, e.g., *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (2007); MPEP §2143.01.III. No predictability is demonstrated by the Examiner. Indeed, the two references are directed to very different problems and technology areas.

The deficiencies with Das were addressed in the last pre-appeal. Ramsayer does no more to overcome the clear errors set forth above. These rejections, which are no more relevant than the ones withdrawn in response to the first pre-appeal, should also be withdrawn. The application should be allowed.

Respectfully submitted,
NIXON & VANDERHYE P.C.

By: _____
John R. Lastova
Reg. No. 33,149

Nixon & Vanderhye PC
901 North Glebe Road, 11th Floor
Arlington, VA 22203-1808
Telephone: (703) 816-4000

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